

## Mexican data for November, 1897.

Stations.	Altitude.	Mean barometer.	Temperature.			Relative humidity.	Precipitation.	Prevailing direction.	
			Max.	Min.	Mean.			Wind.	Cloud.
	<i>Feet.</i>	<i>Inch.</i>	<i>° F.</i>	<i>° F.</i>	<i>° F.</i>	<i>%</i>	<i>Inch.</i>		
Arteaga (Coahuila)...	5,414	28.28	86.7	32.0	63.0	0.28	T.		
Barousse (Coahuila)...	1,656	24.10	79.7	48.2	62.2	0.05	ws.	sw.	
Colima (Sem.).....	6,241	24.36	85.1	28.4	60.6	0.08	sw.	sw.	
Durango.....	5,934	24.36	79.5	34.9	61.2	0.05	s.		
Leon.....	4,948	29.99	95.0	59.7	75.9	77	4.05	ne.	e.
Magdalena (Sonora)...	50	29.99	95.0	59.7	75.9	77	4.05	ne.	e.
Merida (Yucatan).....	7,472	23.12	73.8	39.2	57.7	60	0.30	nw.	ne.
Mexico (Obs. Cent.)...	1,626	28.34	91.4	41.0	66.4	63	3.22	e.	se.
Monterey.....	6,401	24.02	78.8	41.7	61.5	64	0.13	ssw	w.
Morelia (Seminario)...	5,164	25.12	84.2	40.6	66.2	60	0.32	nw.	ne.
Oaxaca.....	7,112	23.39	79.5	31.1	63.0	55	0.43	ne.	
Puebla (Col. Cat.)....	6,070	24.25	78.4	37.9	61.3	55	0.03	e.	
Queretaro.....	5,399	24.93	81.0	41.5	61.2	62	0.08	sw.	n.
Saltillo (Col. S. Juan)	6,202	24.21	75.6	41.5	59.2	64	0.07	ne.	se.
San Luis Potosi.....	6,063	24.35	74.3	46.4	63.3	59	0.01	ene.	sw.
Silao (Guanajuato)...	8,612	22.00				55	1.07	ene.	ese.
Toluca (Mexico).....	8,720		83.1	50.2	63.1		0.00		
Torreón (Coahuila)...	1,864	28.17	92.8	54.7	75.0	71	0.04	nw.	nnw.
Tuxtla (Chiapas).....			85.3	32.0	59.7		0.16		
Vaqueria (Coahuila)...	8,015	22.58	77.0	39.0	58.8	57	0.54	e.	e.
Zacatecas.....	5,078	24.99	81.7	47.1	67.6	58	0.29	se.	sw.
Zapotlan (Jalisco)...									

## BRIGHT METEOR.

By H. A. HAZEN.

On November 3, 1897, at 21:15 (9:15 p. m.) eastern standard time, a very brilliant meteor (nearly half the apparent diameter of the moon) was seen in Washington, D. C., due west from the corner of Massachusetts avenue and Tenth street NW. Its course was vertically downward for about 12°, disappearing at 15° above the horizon. The path at first was narrow, then came a series of dashes, followed by a continuous streak, constantly increasing in brilliancy till it flashed out extremely bright and whitish, when it instantly disappeared. The point of greatest brightness and disappearance formed the lowest apex of an almost equilateral triangle with Vega, Alpha Lyrae, and Altair, Alpha Aquilæ, though a little nearer the latter.

## MILTON G. RENOE.

Milton G. Renoe was born at Manassas, Va., and was educated at Brentsville Academy near Manassas and subsequently at the University of Virginia at Charlottesville. Before entering the Weather Service he was a teacher in the public schools. He enlisted in the Signal Service (now Weather Bureau) on May 23, 1889; was promoted to 1st class private June 10, 1890; in July, 1891, he (with others) was transferred to the position of Observer, Weather Bureau, by virtue of the act transferring the Weather Service from the War Department to the Department of Agriculture. Shortly after July, 1896, he was again promoted and assigned to duty as official in charge of the station at Cheyenne, Wyo., as well as Director of the Wyoming Section of the Climate and Crop Service. Prior to his assignment as official in charge at Cheyenne, he had served as assistant at the following named stations: Baltimore, Albany, Savannah, and Philadelphia. He was an especially careful and painstaking person, and during his connection with the service was five times commended for accuracy in his meteorological work. He died at Cheyenne on the evening of December 16, 1897, at the age of 35. His services in the Weather Bureau distinguished him as a highly valued employee.

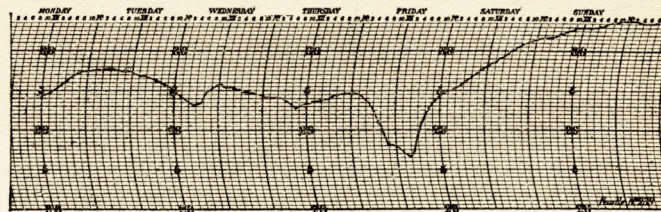
## A WINTER BAROGRAPH CURVE FROM THE SOUTH PACIFIC OCEAN.

By ROBERT DE C. WARD (dated Harvard College Observatory, Southern Station, Arequipa, Peru, S. A., October 1, 1897).

Barograph curves from the southern oceans are comparatively so rare that they possess a considerable degree of interest under any circumstances. That interest naturally

increases if the record represents the pressure conditions registered during a particularly stormy period, and which are remarkable by reason of their sudden changes or other peculiarities. The accompanying plate is a reproduction of a barograph curve obtained during a winter voyage recently made by the writer through the Strait of Magellan and up the west coast of South America as far as Corral, Chile (latitude 39° 52' S.; longitude 73° 17' W.). The instrument, a small sized Richard Freres barograph, was hung by a spiral spring from the ceiling of the stateroom, and was prevented from excessive swinging during rough weather by three cords tied to the handle of the instrument and made fast to hooks fixed at convenient distance in the walls. This method of swinging the barograph was found to answer very well, and a continuous series of excellent curves was obtained on the writer's whole voyage from New York to Peru, by way of Rio de Janeiro, Montevideo, the Falkland Islands, and the Strait of Magellan.

The sheet here reproduced was put on the barograph at noon on Monday, August 2, 1897, when the steamer (the *Luxor*, of the Kosmos Line) was in the Strait of Magellan about 20 miles east of Punta Arenas, and it was removed at 8.15 a. m. on Monday, August 9, when the ship was at anchor in the harbor of Corral. The greater part of the week was exceptionally stormy and the pressure curve is so striking that the writer has thought it might interest the readers of the MONTHLY WEATHER REVIEW to see a reproduction of it.



Tracing from the Richard barograph for the week from Monday, noon, August 2, to Monday, 8 a. m., August 9, 1897, on the steamship *Luxor*, between Punta Arenas and Corral, Chili.

The following record of the weather experienced during the week in question, although unfortunately very incomplete as regards instrumental data, may be sufficiently full to enable those who care to do so to examine the barograph trace intelligently.

*Monday, August 2.*—The morning was stormy, with frequent snow and rain squalls, wind west-northwest, the velocity reaching 35 miles an hour during some of the squalls. At 8.30 a. m. the temperature was 38° and the sky was nearly overcast with nimbus clouds. About noon (temperature 42.1°, clouds strato-cumulus,  $\frac{5}{10}$ ) the wind changed to the south, with a velocity of 45 miles, and the sky cleared rapidly. The barometer, it will be noted, rose during the afternoon and evening, and until about 5 a. m. on August 3. The wind died down toward sunset, and the early part of the evening was clear and calm. At 10.15 p. m. the ship left Punta Arenas for the west, the weather being fine and the wind southwest, force 3.

(It should be noted that the irregularity in the pressure curve shortly after 9 p. m. was due to an accidental jarring of the instrument.)

*Tuesday, August 3.*—At 4 a. m. the wind was west, force 3, and it blew steadily from west-northwest, force 4 to 7, from shortly after 4 a. m. until about 4 p. m. The force increased during the day, and after 3 p. m. was between 7 and 9. Frequent rain or snow squalls continued all day and night. At 8 a. m. the temperature was 43.2°; wind velocity 25 miles an hour; clouds, nimbus 10. At noon the temperature was 45°, and the velocity of the wind 30 miles. As the wind was in-